Research on the Paradigm Innovation of online Geriatric Education from the Perspective of Embodied Cognitive Theory: Take Tea Culture Education as An Example

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Abstract
“Embodied” has become an important concept in almost all fields of cognitive science. “In philosophy, psychology, neuroscience, robotics, education, cognitive anthropology, linguistics, and the dynamic system approach to behavior and thought, embody and situatedness have been talked about more and more frequently.” With the increasing influence of personal cognition, it is of great significance to education, especially to the applied research of online education for the elderly. On the basis of analyzing the deficiency of current education for the elderly, this paper innovated the paradigm of online education for the elderly from the perspective of embodied cognitive theory, so as to promote the development and transformation of education for the elderly. Finally, this study achieved the goal of truly realizing the unity of the overall social development and the individual development of the elderly.

Key words: Embodied cognition; Online education for the elderly; Paradigm, Tea culture

1. INTRODUCTION

Education for the elderly is an educational activity that allows the elderly to continue to learn. It is an integral part of the whole educational cause. Education for the elderly is not a preparation for career, nor is it vocational training, which is different from general education, vocational education and professional education, but a kind of special education according to the physical and psychological characteristics of the elderly. Its purpose is to enable the elderly to increase their knowledge, broaden their horizons, enrich their lives and strengthen their physique. The object of education for the elderly is the elderly at all levels. However, the existing educational resources for the elderly cannot meet the huge demand for geriatric education. With the rapid development of “Internet +”, online courses have become an important way to meet the needs of geriatric education. As the theory of lifelong aging education and active aging has become the leading theory of aging education, whether online courses can interpret the theory of lifelong aging education and active aging has a direct impact on the healthy development of education for the elderly. We find that there are deficiencies in the practice of active aging theory, we need to further promote the development of skills training courses, personalized aging teaching methods, and actively promote the elderly to become new renewable resources. The pace of exploring a new paradigm of cognitive research has not stopped, and embodied cognition has gradually entered people’s field of vision under such a background.

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2. THE CONNOTATION OF THE THEORY OF PERSONAL COGNITION AND ITS SIGNIFICANCE TO THE EDUCATION OF THE ELDERLY

2.1 The Connotation of Embodied Cognitive Theory

Embodied cognition is also translated as “body-related” cognition, and its core emphasizes that cognition is embodied, that is, the body plays a vital role in the cognitive process, and human cognition is formed through physical experience and corresponding behavior. Traditional cognitivism holds that the body is the effector of stimulation and the sensor of activity. In contrast, embodied cognition not only emphasizes the importance of the body in cognitive activities, but also emphasizes the influence of the environment of the body on cognitive activities. Scholars who hold the viewpoint of embodied cognition believe that human thinking and cognition depend on the body to a great extent. The way the body moves, the structure of the body, and the sports experience of the body all determine how we know and understand the world, as well as what kind of cognitive style and way of thinking we have. If humans had the body structure of animals, the world we perceive would be very different from what it is now. Therefore, cognition depends on the body, and cognition is embodied (Shen and Ouyang, 2014).

2.1.1 Physical Characteristics Provide the Physical Properties of Cognition

Anderson proposed that cognitive activities can make use of the structural characteristics of the body to achieve their goals, and they themselves can be shaped in the process. In other words, the relationship between physical characteristics and cognitive attributes is not static, there is co-evolution between them. For example, due to the limitations of the body itself, humans cannot cook directly with their hands, but they can use some tools to achieve their goals. In this process, human beings continue to create new tools and methods, and the flexibility of the hand is also improving. At the same time, some physical properties that can be better applied to cognitive activities will be preserved, and accordingly, the attributes applicable to specific body organs will also be retained.

2.1.2 Physical State Affects Psychological and Cognitive Activities

The stimulation of physical properties such as the warm experience of the body and the touch of the skin can affect people’s cognition and judgment. In a study on the effect of skin temperature perception on interpersonal relationship judgment, Williams and Bargh arranged for an assistant to meet the subjects in an elevator. On the way, the assistant asked the subjects to help bring coffee (hot coffee or iced coffee). The results showed that subjects with hot coffee were more likely to think their assistants were friendly than those with iced coffee. It can be seen that the temperature experience of the body affects the impression of others and the generation of prosocial behavior. In another study on the effect of weight on metacognitive judgment, Michael W. Alban found that subjects with heavy clipboards were more likely to think that words could be better remembered than those with lightweight clipboards, and that the physical experience of weight affected psychological cognitive judgment.

Body movements can also affect people’s attitudes. In Strack. F.’s study, some of the subjects were asked to hold a pen in their mouth, which looked like a disagreeable action, while others were tried to bite the pen with their teeth, which looked like a smile, and then asked them to judge the interest of the cartoon characters. The results showed that the subjects who bit the pen with their teeth were more likely to think that the cartoon characters were interesting than those with their mouths (Shen and Ouyang, 2014).

2.1.3 The Body Is Placed in the Situation for Cognitive Optimization

Cognition is situated-ness, and human cognition and behavior take place in specific situations and are restricted by situations. Cognition exists in the brain, the brain exists in the body, the body exists in the situation, and people exist in the world in the form of “body” and interact with the world. Situation is the premise of cognition and behavior, and then becomes the object of cognition and behavior, and finally acts on cognition and behavior. Therefore, in order to understand cognition, cognition must be placed in the situation and in the body in the situation. When talking about the influence of environment on cognition, Rowlands proposed that “the external world is the storage place of information related to perception, memory, reasoning and other processes, and the cognitive process is a hybrid, with both internal and external operations.” In a word, cognition occurs only when it is embedded in the situation, and it is an activity in which people interact with others or communities in a certain natural and social environment.

2.2 The Significance of Embodied Cognitive Theory to the Education of the Elderly

2.2.1 The Significance of Physical Characteristics Providing Cognitive Physical Attributes to the Education of the Elderly

The relationship between physical characteristics and cognitive attributes is not static, there is co-evolution between them. At present, the number of the elderly is increasing sharply, and the phenomenon of aging is obvious. The physical conditions, living environment and ideology of the elderly are changing all the time. With the great wealth of material, the pursuit of spiritual culture of the elderly is also rising day by day. The elderly have already experienced the baptism of time and the precipitation of practice, so they have more calmness and calmness, and the “verve” from the bones is the
connection line that runs through the whole bubbling process. the air revealed in the eyes and the appeal of the body are the manifestation of co-evolution between physical characteristics and cognitive attributes. Through the physical characteristics to provide cognitive physical properties to enrich the leisure life of the elderly, so that the elderly live a more fulfilling and meaningful life in their twilight years.

2.2.2 The Influence of Physical State on the Significance of Psychological Cognitive Activities to the Education of the Elderly
The warm experience of the body, the sense of skin touch, the form of action and so on can affect people’s cognition and judgment. It is of great significance for the elderly to make a cup of good tea in the process of learning tea culture. After soaking the finished tea in boiling water, the appropriate utensils, water temperature, time and brewing methods are selected to make the soluble substances in the tea fully dissolve in the water and become a beverage with good color, aroma and taste. Through learning, make the elderly have the characteristics of “spirit and beauty, sincerity, skill”. In the process of brewing activities, they can fully express the beauty of different realms of “spirit, beauty, quality, uniformity and ingenuity”. The influence of physical state on psychological and cognitive activities is conducive to the continued socialization of the elderly and makes them adapt to retirement life and new social roles more smoothly.

2.2.3 The Significance of Cognition of Body in Situation to the Education of the Elderly
Cognition occurs only when it is embedded in the situation, and it is an activity in which people interact with others or communities in a certain natural and social environment. In learning to make tea, the elderly keep an ordinary heart, even if they usually encounter some difficulties in the process of communicating with their old friends, through making tea, calm down, accompanied by beautiful music, a touch of tea fragrance to dissolve the anxiety in the heart. This can enable the elderly to improve their own quality in the process of learning and establish the virtue of tolerance and etiquette. In the process of making tea, we require the elderly to move gracefully and softly, to have a certain posture of standing and sitting, and to improve their external image and internal quality. Through the cognition of the body in the situation to improve the self-cultivation of the elderly, it is helpful to the construction of spiritual civilization for the elderly.

3. THE ANALYSIS OF THE MAIN PROBLEMS AND CAUSES OF THE CURRENT ONLINE EDUCATION PARADIGM FOR THE ELDERLY
Teaching paradigm refers to people’s most basic understanding or view of the special phenomenon and complex activity of teaching in the field of education. It mainly includes the common model and model of teaching goal, teaching content, teaching paradigm, teaching carrier, teaching relationship, teaching evaluation and so on. Under the guidance of advanced ideas, the goal of constructing a new teaching paradigm is to train students in a scientific way, which reflects the basic spirit of student-centered teaching reform. (Chen and Jiang, 2018)

The basic feature of the traditional education and teaching paradigm of “classroom-centered, textbook-centered, teacher-centered” is that “teachers are always in the center of absolute authority, take textbooks as the basis, impart knowledge as the goal, and mainly adopt the instillation teaching method”. Therefore, the main problems and reasons existing in the current online education paradigm for the elderly are mainly reflected in the following aspects:

3.1 The Unbalanced Development of Education for the Elderly
Education for the elderly is the last relief of the life-long education system. Life-long education refers to the sum of all kinds of education that people receive at all stages of their lives. The education for the elderly in China is mainly concentrated in the universities for the elderly in large and medium-sized cities, and most of the learners are the elderly in the city, such as retired civil servants, teachers, enterprise workers, etc., while the rural elderly, who account for the majority of the elderly population, do not get the right to educational development. Due to the neglect of the development of education for the elderly in rural areas, the development of education for the elderly in urban and rural areas is unbalanced, resulting in unfair education.

Education for the elderly mainly relies on provincial and municipal universities for the elderly, community centers for the elderly and so on as a teaching environment to carry out teaching. However, with the increasing demand for education for the elderly, universities for the elderly have emerged a difficult phenomenon. The existing teaching environment has been far from being able to meet the needs of society.

3.2 The Curriculum of Education for the Elderly Is Monotonous
Most of the current teaching courses for the elderly lack the spirit of keeping pace with the times, and the teaching content remains unchanged for a long time, which cannot adapt to the overall requirements of social changes and the diversified individual needs of students.

The courses in the university for the elderly are mainly leisure and health, such as calligraphy, answering, singing, health care, photography, art, sports, horticulture and so on. The curriculum in the education for the elderly is limited to the use of curriculum, lack of guidance to the physical and mental health of the elderly (Zhou, 2016).
3.3 The Teaching Method of Education for the Elderly Is Backward

Education for the elderly is regarded as a kind of “compensatory” education, and it is believed that the purpose of carrying out education for the elderly is to make up for the “learning dream” of the elderly when they are young. Once in the process of teaching, we only pay attention to the transmission of content, but do not pay attention to the absorption and transformation of knowledge by the elderly and the generation of new knowledge.

The traditional “Inculcating knowledge method” is often adopted in the current teaching methods of education for the elderly, and the phenomenon of “teachers say students listen” and “inculcate knowledge in the whole class” is serious. This teaching method ignores that learning is an active activity, the elderly students are individuals with active thinking, and simply regards the elderly students as passive objects and negative knowledge receptors. Finally, it leads to the weakening of teachers’ teaching innovation and the loss of students’ enthusiasm for learning.

4. THE PRACTICAL PATH OF THE INNOVATION OF ONLINE EDUCATIONAL PARADIGM FOR THE ELDERLY

The enlightenment of personal cognitive theory to the innovative practice path of online geriatric education paradigm

4.1 Situational Teaching

According to the traditional cognitive view, knowledge is a closed entity acquired in task situations, which can be widely transferred to other situations and has the characteristics of closeness and stillness. The embodied cognitive view holds that knowledge is a cognitive product in situational activities and cannot exist alone without the situation. Even those abstract knowledges must be placed in a certain context in order to make sense. Knowledge that leaves the situation cannot be called real knowledge, and situational experience plays an indelible role in the cognitive process. As a cognitive activity, learning will be affected by the problem situation and the surrounding environment. Therefore, according to the viewpoint of embodied cognitive theory, in the process of teaching, teachers should pay attention to create problem situations for students, optimize the classroom atmosphere, and provide a favorable environment for students’ cognitive activities.

Embodied cognition holds that knowledge is the product of the interaction between the cognitive subject and its environment. For students to learn, the environment here is the learning environment, and to a large extent refers to the problem situation created by teachers. The degree of students’ mastery of knowledge is not only related to the students’ own factors, but also to the problem situation in the classroom. The creation of problem situations can activate students’ previous knowledge, promote the understanding of new concepts, help them explain knowledge, and stimulate their cognitive curiosity.

In the face of teaching for the elderly, taking the teaching of tea culture as an example, teachers can record micro-video in advance, and the brewing technique can be paused at each stage and broadcast at random, so as to stimulate students’ cognitive conflict, improve students’ thirst for knowledge, and help students to acquire knowledge, promote the development of students’ cognition.

The beauty of tea art, that is, the beauty of artistic conception. Mr. Lin Yutang said, “Spirit and nature are integrated into one.” Professor Yu Dan said: “Scenery and people, a quiet and moving, set off each other, echo each other, and even integrate, subjective feelings and objective things constitute a flowing space, this is a kind of artistic realm is artistic conception.”

Through the visual presentation of tea art, tea practitioners can introduce tea tasters into the artistic realm of an imaginary space, that is, the artistic conception of tea. In the aesthetic appreciation of tea art, the beauty of artistic conception is to consider the comprehensive accomplishment of a tea practitioner. Although tea-making techniques are important, tea learners’ rich knowledge and self-cultivation, rich life experience and life experience are the key to determine the level of artistic conception, such as emptiness, emptiness, deep seclusion, profound nostalgia and so on. The beauty of tea art includes: true beauty, harmony beauty, exquisite beauty, elegant beauty, magnificent beauty, elegant beauty, ancient beauty and so on. True beauty is natural beauty. Tea practitioners use real water to make real tea, but also use their heart, true self and true feelings. The action of tea is natural, such as “popular on the water, natural lines”, with the original new, brew a cup of tea with its own flavor, take the heart as the foundation, make the tea of the soul, and return to nature. The beauty of “harmony” in tea art is a rhythmic beauty from eyes, ears, nose, tongue, body to newness and meaning. Exquisite, is the tea practitioner to deploy external interference, adhere to the original nature, adhere to the original mind. Elegant beauty is that tea practitioners should have high-pressure aesthetic taste, exquisite tea-making machine, noble moral character and knowledge. Magnificence, refers to the beauty of masculinity, female tea practitioners because of external softness and inner rigidity, the physical movement of the flesh and inner strength complement each other, soft with rigidity. Male tea practitioners should reflect the beauty of masculinity, acting at will, rigid but not stiff, rigid but not hard, with softness in the middle. Elegant beauty, tea practitioners have an extraordinary taste, pine wind and
stone spring, famous flowers and trees, a cup of tea, two hands breeze, do not strive for fame and wealth, elegant free and easy, to create an “elegant” artistic conception. Ancient beauty, tea practitioners to create an ancient, ethereal, mysterious artistic conception, so that tea drinkers can transcend the present, beyond time and space, feel ancient, simple, elegant atmosphere, endless aftertaste between illusion and reality, deep taste. The situational teaching can be guided by the theory of physical cognition, which can stimulate the elderly students' desire for knowledge and guide them to explore together, so as to get new knowledge.

4.2 Dynamic Teaching
Cognition is an evolutionary or dynamic system, in the process of dealing with environmental information, the brain state changes continuously, and cognition becomes the real-time and adaptive activity of the agent embedded in the environment. According to the theory of embodied cognition, cognition is a continuous process of dynamic development with time. The traditional teaching view holds that teaching is the process of presenting the teaching plan and teaching goal completely, but in essence, it is not a mechanical implementation process according to the established plan. What happens in the teaching process cannot be decided unilaterally by teachers, and the achievement of teaching goals is not determined by the teaching plan, but more by the learning status of students and teachers’ strategies. Therefore, teaching cognition is not a simple cycle of ideas, not a “projection” from one brain to another, but a cognition that is constantly modified in the interaction between the body and the environment. In classroom teaching, teachers should constantly revise their teaching understanding and adopt appropriate teaching strategies according to their own understanding of the environment, including students’ state, classroom atmosphere, teaching content and so on.

The second paradigm of online education for the elderly is to skillfully master the seven essentials of learning tea in the process of learning tea, that is, the seven essential elements of learning tea, including seven elements: tea, water, utensils, time, ceremony, heart and spirit. In the process of learning tea, these seven elements should always pay attention to and master the law in the process of dynamic change, which is the most difficult and core part. For example. Tea is the most critical and fundamental of the seven elements. Tea recognition and tea appreciation are the basic skills of making good tea. According to the different processing technology and quality characteristics of fresh leaves, Chinese tea is divided into six basic tea categories: green tea, white tea, yellow tea, green tea (oolong tea), black tea and black tea, each of which has a wide range of products. There are also reprocessed teas, such as scented tea, craft tea and so on. Different kinds of tea, different regions, different varieties, different processes, the quality of tea is different. Therefore, when we educate the elderly online, we should first understand the quality characteristics of all kinds of tea before we can see the tea. The requirements and character of online education are very high.

Through the cognitive theory of appliance body to guide dynamic teaching, tea learning is a combination of dynamic and static. Only when it is really dynamic, can we experience joint participation, joint exploration and acquire new knowledge.

4.3 Human Nature Teaching
Embodied cognitive theory attaches importance to the importance of the body in the cognitive process. Cognition is realized by the individual through the interaction with the outside world, and the acquisition of cognition can also affect the interaction between the individual and the environment. To guide teaching with the theory of personal cognition, we need to pay attention to the human nature of teaching, give students physical space freedom, pay attention to students’ spiritual world and individual needs, and urge students to construct knowledge actively.

In the traditional classroom teaching, the students’ body is mainly disciplined, and the freedom of the body is restricted to a certain extent. The body is the means and tool of students’ cognitive acquisition, and the restriction of physical freedom will lead to the restriction of students’ mental freedom. At present, most schools are building student-based classrooms, and students’ autonomous learning and cooperative learning are indispensable links in student-based classrooms. When students discuss and cooperate, students can decide their own spatial position as well as their body posture. Returning physical freedom to students means giving students autonomy and equality, which is conducive to the exertion of students’ creativity and promote students to construct cognition effectively.

Gibbs pointed out: “People’s subjective feelings of the body and the experience of the body in activities provide part of the basic content for language and thought.” A good learning atmosphere and a relaxed and pleasant learning environment are conducive to students’ cognitive development, which requires teachers to pay attention to students’ subjective experience in class. The traditional teaching methods are filled with teachers, students learn by rote, do not pay attention to the actual needs of students, which is not conducive to the exertion of students’ subjectivity. For this reason, teachers need to pay attention to the individual needs of students, arrange classroom teaching reasonably according to students’ needs, pay attention to students’ subjective spiritual world, and let students develop themselves in a pleasant environment.

When the elderly practice tea online, they should cultivate their self-cultivation and pay attention to human nature. For thousands of years, tea has changed from Lu Fu’s “elixir of light body” to “cultural symbol that
moistens the soul” of literati. For thousands of years, literati drink tea not only to quench their thirst, but also to achieve the harmony of mind, body and spirit. Mr. Wu Juernong, the contemporary tea saint, believes that tea is regarded as a precious and noble hard material, and drinking tea is a kind of spiritual enjoyment, an art, or a means of self-cultivation. Mr. Zhuang Wanfang said: “the tea ceremony is a kind of ceremony for people to carry out etiquette education and moral cultivation by drinking tea.” Old people have experienced many things in life, so they can finally cultivate themselves. Today’s young people are very hard and busy running around, and they seldom have time to sit down and accompany the old people, so we old people let ourselves sit between plants and trees, such as going back to the ancient mountains and forests, feeling the breeze and enjoying the good times in the days when there is tea. Therefore, in the online education paradigm, we will make a cup of tea to guide the elderly to focus their eyes, ears, nose, tongue, body and mind on a cup of tea to relax and peace of mind. Mr. Lin Yutang said, “People who look at the busy world with a cool head” can realize the “wonderful smell of weak tea.”

When we taste life with a cool head, we will find the fun and interest of life. Tea makes our life better. This is one of the paradigms of online education for the elderly, the human nature of teaching.

### 4.4 Experiential Knowledge

The theory of embodied cognition emphasizes the materiality of cognition, and cognition depends on the body, which means that “the cognitive subject uses the body, sensory system and so on for cognition, which has direct experience from the surrounding environment, so the cognitive behavior is embodied” . Learning depends on students' physical function’s cognition of knowledge and experience. Therefore, in order to guide teaching with the theory of embodied cognition, we should pay attention to students’ experience of knowledge.

The common view of cognitive psychologists is that knowledge is divided into “declarative knowledge” and “procedural knowledge”. Declarative knowledge is the knowledge that answers “what is” and can be stated directly. For this kind of knowledge, we can understand its abstract concepts in a metaphorical way and with the help of the activity experience of the body. Some psychological studies have found that when people acquire knowledge, the common use of multiple physical functions is better than the use of a single physical function. Therefore, in classroom teaching, teachers can make use of multimedia to increase the experience of knowledge and interpret knowledge in the most direct and vivid way. Procedural knowledge is the knowledge that answers “what to do” and can only be inferred indirectly with the help of some form of activity. For this kind of knowledge, we can organize students to conduct indoor or outdoor activity courses, fully mobilize students’ enthusiasm to participate in the classroom, increase the perception of knowledge in practice, and help students to actively construct knowledge.

The knowledge of Chinese tea culture is broad and profound, which needs to be transported to a lot of tea culture knowledge in the process of learning tea, and this tea culture knowledge can be completed in practical experience, which is what we call the teaching guided by the theory of personal cognition. For example, the etiquette of learning tea. There are the etiquette of tea drinkers, the etiquette of tea drinkers, and the etiquette between tea drinkers and tea drinkers. In the process of salutation, there are bow salute, divine palm salute, sign salute, answer salute, check the first ceremony and so on. On different occasions, there are meeting etiquette, greeting etiquette, tea etiquette, farewell etiquette and so on. Therefore, when we educate the elderly online, we need to set up a tea space to show and explain. From entering the teahouse, seating and tasting tea, we offer tea etiquette to express the deep respect of the tea drinkers to the tea drinkers. After the tea tasters have accepted the tea practitioners’ etiquette, return with thanks etiquette. Tea drinkers and tea drinkers should also be courteous and respectful to each other, so that they can give priority to each other, elders or distant guests. Respect from the heart runs through the whole process of tea learning and tea affairs. Tea practitioners skillfully use tea etiquette, tea tasting and tea drinkers to express their respect for people, heaven, earth and all things by taking tea as the carrier of agreement, silence and tacit understanding. This is the best experience for the elderly to calm down and study and cultivate themselves in the process of tea learning. Through the practice of tea, the elderly will gradually understand that the core of the tea ceremony is respect, put respect in the heart, have virtue in the heart, have respect for people and nature, have awe, and will be full of yearning for a better life.

This is to use the embodied cognitive theory to guide teaching and pay attention to the importance of students’ experience of knowledge.

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